

REMARKS

In response to the Final Office Action, applicants have cancelled the previously pending claims. New claims 24 to 29 are presented along with a Request for Continued Examination.

New claim 24 relates to method for processing and evaluating a semiconductor wafer in an integrated metrology setting. In this approach, the wafer is processed in a process station, such as by polishing. After polishing, a transport system moves the wafer to an adjacent metrology station where it can be evaluated. In accordance with claim 24, a first measurement is made of broadband light that has been reflected from the sample. In addition, a second measurement is made of the broadband light which has not been reflected from the sample (monitor beam). The second measurement is used to correct for system characteristics. In the illustrated embodiment (Figure 1), the second measurement is obtained by monitoring light that is transmitted directly through beam splitter 135 and directed to spectrometer 141.

The subject specification as filed (including Figure 1) describes and illustrates these two measurements. Upon review, it was noticed that a few paragraphs related to this aspect of the invention that appeared in the parent provisional application (Serial No. 60/125,462, filed March 22, 1999) were not carried over into this specification. For completeness, applicants have copied some text from the provisional application (found on pages 14 and 15 thereof) into the corresponding locations in this specification. As the provisional application was incorporated by reference, no new matter has been added. Applicants have included a copy of the prior provisional application for the Examiner's convenience (attached as Exhibit A).

In the prior Office Action, the Examiner objected to an amendment to the claims as introducing new matter. Specifically, the Examiner objected to the description of the light source as including visible and ultraviolet light. While the claim rejected by the Examiner has been cancelled, the limitation has been represented in new claim 27 and therefore will be addressed.

In making this rejection, the Examiner noted that the specification teaches at page 8, the use of ultraviolet (UV) or the visible or the near infrared (NIR) light as different embodiments. However, the next paragraph in the specification describes the **preferred embodiment** as a "broadband reflectometer" using a UV Xenon lamp. It is well known to those skilled in the art that a Xenon lamp emits broadband light over the UV, visible and IR. More importantly, a UV Xenon lamp has enhanced emissions in the UV. One skilled in the art reading this paragraph

would understand that the preferred light source was broadband with both UV and visible transmission.

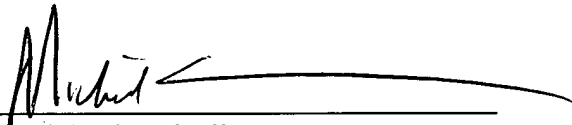
Applicants' intended meaning is supported by their earlier provisional application discussed above. The description of the preferred embodiment of the broadband reflectometer appears at page 7, beginning at line 10 which states as follows: "Reflectometer assembly 100 comprises a broadband (UV, visible, NIR) reflectometer measurement system." As can be appreciated, this is the same sentence as in the pending application but makes clear that the preferred embodiment is "broadband" and consists of UV, visible and NIR light. This interpretation is completely consistent with the description of the light source as being a Xenon or UV Xenon lamp. Applicants have amended the specification to pick up the text from the incorporated provisional application to further support the claim language. In view of the above, it is believed that the Examiner's rejection should be withdrawn.

It is respectfully submitted that the newly presented claims are neither anticipated nor rendered obvious by the prior art of record and early allowance is respectfully requested.

Respectfully submitted,

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Enclosure:

Exhibit A: Provisional Application No. 60/125,462